

REMARKS

The Examiner is thanked for the thorough examination of the application. No new matter is believed to be added to the application by this Amendment.

Status Of The Claims

Claims 1-3 and 6-19 are pending in the application. Claims 4 and 5 have been canceled by this Amendment. Claims 1 and 18 have been amended to incorporate subject matter from claims 4 and 5. Support for the amendments to claims 2 and 3 can be found in the specification at page 15, lines 9-12. Support for amended claim 6 can be found in the specification at page 11, lines 15 and 16. Support for amended claim 8 can be found in the specification at page 12, lines 8 and 9. Claims 17 and 19 have been amended to better set forth the invention being claimed.

Rejections 35 U.S.C. §112

Claims 6 and 8 have been rejected under 35 U.S.C. §112, first paragraph as not complying with the written description requirement. Claim 8 has been rejected under 35 U.S.C. §112, second paragraph as being indefinite. Applicants traverse.

In paragraph 2 of the Office Action, the Examiner asserts that claim 8 has failed to specify a basis for the claimed weight percent. However, it is clear from the disclosure at page 12 of the specification that the claimed propylene oxide is present as a component of the polyether polyol. As a result, claim 8 is clear and definite.

In paragraph 3 of the Office Action, the Examiner asserts that claims 6 and 8 were not adequately described in the specification. However, claims 6 and 8 have been amended to better conform with the specification. Additionally, regardless if a percentage is construed as a weight

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percentage or a mole percentage, the invention can nonetheless be practiced by one of skill without undue experimentation. However, the "5 %" of claim 6 means the molar percentage of single-ionized organometallic salt compared to the number of moles of total organometallic salt.

These rejections are overcome and withdrawal thereof is respectfully requested.

Rejections under 35 U.S.C. §103 (a)

Claims 1-10 and 12-19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Vreeland '001 or '457 (U.S. Patent 5,541,001; U.S. Patent 5,571,457) or Gloyer (U.S. 2001/0046576) each in view of Barksby (U.S. Patent 6,420,445) and Knobel (U.S. Patent 5,110,669). The Examiner has added the teachings of Nogami (U.S. Patent 5,618,646) or Priebe (U.S. Patent 5,869,188) to the foresaid rejection to reject claim 11. Applicants traverse.

The present invention pertains to a conductive urethane composition formed from polyurethane obtained by a poly-addition reaction of polyol and polyisocyanate, and the composition contains an organic ionic-conductive agent other than chlorine or bromine containing ammonium salts, and organometallic salts having fluoro groups and/or sulfonyl groups is contained as said organic ionic-conductive agent, the organometallic salts being metal salts of bis(fluoroalkyl-sulfonyl)imide and/or metal salts of fluoroalkyl sulfonic acid. In the invention, polyether polyol is used as the polyol, and an average value of a non-saturation degree of said polyether polyol is set to not more than 0.025 milliequivalents/g (see claim 1).

All of the cited art fails to disclose or suggest the 0.025 milliequivalent/g limit of non-saturation recited in claim 1 of the present invention.

Vreeland '001 pertains to a polyurethane suitable for a roll that is formed by reacting a polyisocyanate polymer, a polyol and a conductivity control agent that is an ammonium

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tetrahaloferrate salt.

Vreeland '457 pertains to the polymeric material formed from a polyurethane obtained by reacting a polyisocyanate polymer with a polyol blended with a ferric halide complex.

Gloyer pertains to a polyurethane elastomer formed from a polyisocyanate prepolymer and a polyether polyol prepolymer (claim 1). Gloyer, in claims 2 and 3, recites polyol charge-control agents.

Vreeland '001, Vreeland '457 and Gloyer all fail to disclose a degree of unsaturation of the polyether polyol that is not more than 0.025 milliequivalents/g (claim 1 of the present invention). The Examiner unequivocally admits to this failure of the primary references in paragraph 6 of the Office Action.

The primary references additionally fail to disclose or suggest an organic ionic-conductive agent other than chlorine or bromine containing ammonium salts, and organometallic salts having fluoro groups and/or sulfonyl groups is contained as said organic ionic-conductive agent, the organometallic salts being metal salts of bis(fluoroalkyl-sulfonyl)imide and/or metal salts of fluoroalkyl sulfonic acid.

In paragraph 6 of the Office Action, the Examiner then turns to Barksby for teachings pertaining to unsaturation. Barksby column 7, line 44 mentions "low unsaturation polyoxypropylene glycol." However, Barksby fails to disclose the 0.025 milliequivalent/g limit of non-saturation recited claim 1 of the present invention.

In paragraph 6 of the Office Action, the Examiner refers to columns 7 and 8 of Knobel for teachings pertaining to ionizable salts. However, Knobel fails to specifically disclose the specific lithium salts set forth in instant claim 17.

In paragraph 8 of the Office Action, the Examiner turns to Nogami for teachings pertaining to the treatment of the metal shaft to reject claim 11. However, these teachings of Nogami fail to address the deficiencies of the other cited art references in suggesting a claimed embodiment of the present invention.

That is, all of the cited art utilized by the Examiner fails to teach or suggest “an average value of a non-saturation degree of said polyether polyol is set to not more than 0.025 milliequivalents/g” such as is set forth in claims 1, 18 and 19. As a result, the cited prior art fails to teach or suggest each and every element of the independent claims of the present invention.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “All the words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Therefore, one having ordinary skill in the art would not be motivated by Vreeland ‘001 or ‘457, Gloyer, Barksby, Knobel, Nogami and Priebe to produce a claimed embodiment of the present invention. A *prima facie* case of obviousness has thus not been made.

Further, even if one assumes *arguendo* that the cited art is sufficient to allege *prima facie* obviousness, this obviousness would be fully rebutted by the unexpected results shown in the Examples of the specification for such properties as low staining, picture quality and uniformity of electrical resistance. The advantages of the invention are thus clear.

These rejections are overcome and withdrawal thereof is respectfully requested.

Information Disclosure Statement

The Examiner is thanked for considering the Information Disclosure Statement filed July
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30, 2003 and for making the initialed PTO-1449 form of record in the application in the Office Action mailed March 22, 2005.

Prior Art

The prior art cited but not utilized by the Examiner indicates the status of the conventional art that the invention supersedes. Additional remarks are accordingly not necessary.

The Drawings

The Examiner has accepted the drawings in the Office Action mailed December 2, 2005.

Foreign Priority

The Examiner has acknowledged foreign priority and noted that a certified copy of the priority document has been received most recently in the Office Action mailed June 28, 2006.

Assignment

The Assignment was recorded on July 30, 2003 at reel 014362, frames 0265-0267.

Conclusion

The Examiner's rejections have been overcome, obviated or rendered moot. No issues remain. It is believed that a full and complete response has been made to the Office Action. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

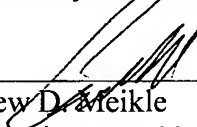
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No.42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: October 30, 2006

Respectfully submitted,

By


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